Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.' " M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application **Commissioner for Patents** P.O. Box 1450 Alexandria VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Yan I. Wang, Tom Derryberry

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors." For (title):

TITLE: ADAPTIVE SPREADING FACTOR BASED ON POWER CONTROL

EXPRESS MAILING UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date February 17, 2004 __, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 as "Express Mail Post Office to Addressee" Mailing Label No. $\frac{EV}{393301065}$ US

> Cathy Wilcox (type or print name of person mailing paper)

Signature of person certifying

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1]-page 1 of 15)

1. Type of Application This new application is for a(n) (check one applicable item below) □ Original (nonprovisional) □ Design □ Plant WARNING: Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application. WARNING: Do not use this transmittal for the filing of a provisional application. NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION. Divisional. Continuation. ☐ Continuation-in-part (C-I-P). 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121) NOTE: "A nonprovisional application or international application designating the United States of America may claim an invention disclosed in one or more prior-filed copending nonprovisional applications or international applications designating the United States of America. In order for an application to claim the benefit of a prior-filed copending nonprovisional application or international application designating the United States of America, each prior-filed application must name as an inventor at least one inventor named in the later-filed application and disclose the named inventor's invention claimed in at least one claim of the later-filed application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior-filed application must be: (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or (ii) Complete as set forth in § 1.51(b); or (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(f) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING: 37 C.F.R. § 1.78(a)(2) deals with the time in which the claim for the benefit of an earlier filing date must be made and states:

"(2)(i) Except for a continued prosecution application filed under § 1.53(d), any nonprovisional application or international application designating the United States of America claiming the benefit of one or more prior-filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain a reference to each such prior-filed application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross references to other related applications may be made when appropriate (see § 1.14).

- (ii) This reference must be submitted during the pendency of the later-filed application. If the later-filed application is an application filed under 35 U.S.C. 111(a), this reference must also be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months from the filing date of the prior-filed application. If the later-filed application is a nonprovisional application which entered the national stage from an international application after compliance with 35 U.S.C. 371, this reference must also be submitted within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) in the later-filed international application or sixteen months from the filing date of the prior-filed application. These time periods are not extendable. Except as provided in paragraph (a)(3) of this section, the failure to timely submit the reference required by 35 U.S.C. 120 and paragraph (a)(2)(i) of this section is considered a waiver of any benefit under 35 U.S.C. 120, 121, or 365(c) to such prior-filed application. The time periods in this paragraph do not apply if the later-filed application is:
 - (A) An application for a design patent;
 - (B) An application filed under 35 U.S.C. 111(a) before November 29, 2000; or
- (C) A nonprovisional application which entered the national stage after compliance with 35 U.S.C. 371 from an international application filed under 35 U.S.C. 363 before November 29, 2000.
- (iii) If the later-filed application is a nonprovisional application, the reference required by this paragraph must be included in an application data sheet (§ 1.76), or the specification must contain or be amended to contain such reference in the first sentence following the title.
- (iv) The request for a continued prosecution application under § 1.53(d) is the specific reference required by 35 U.S.C. 120 to the prior-filed application. The identification of an application by application number under this section is the identification of every application assigned that application number necessary for a specific reference required by 35 U.S.C. 120 to every such application assigned that application number."

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

3. Papers Enclosed

A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application

Pages of specificationPages of claims

__7_ Sheets of drawing

WARNING: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).

NOTE: "Identification of drawings. Identifying indicia, if provided, should include the title of the invention, inventor's name and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin." (complete the following, if applicable) The enclosed drawing(s) are photograph(s). NOTE: 37 C.F.R. 1.84 "(b) Photographs. "(1) Black and white. Photographs, including photocopies of photographs, are not ordinarily permitted in utility and design patent applications. The Office will accept photographs in utility and design patent applications, however, if photographs are the only practicable medium for illustrating the claimed invention. For example, photographs or photomicrographs of: electrophoresis gels, blots (e.g., immunological, western, Southern, and northern), auto radiographs, cell cultures (stained and unstained), histological tissue cross sections (stained and unstained), animals, plants, in vivo imaging, thin layer chromatography plates, crystalline structures, and, in a design patent application, ornamental effects, are acceptable. If the subject matter of the application admits of illustration by a drawing, the examiner may require a drawing in place of the photograph. The photographs must be of sufficient quality so that all details in the photographs are reproducible in the printed patent. "(2) Color photographs. Color photographs will be accepted in utility and design patent applications if the conditions for accepting color drawings and black and white photographs have been satisfied. See paragraphs (a)(2) and (b)(1) of this section." The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached, 37 C.F.R. §§ 1.84(a)(2) and 1.84(b). NOTE: 37 C.F.R. 1.84(a) "(2) Color. On rare occasions, color drawings may be necessary as the only practical medium by which to disclose the subject matter sought to be patented in a utility or design patent application or the subject matter of a statutory invention registration. The color drawings must be of sufficient quality such that all details in the drawings are reproducible in black and white in the printed patent. Color drawings are not permitted in international applications (see PCT Rule 11.13), or in an application, or copy thereof, submitted under the Office electronic filing system. The Office will accept color drawings in utility or design patent applications and statutory invention registrations only after granting a petition filed under this paragraph explaining why the color drawings are necessary. Any such petition must include the following: (i) The fee set forth in § 1.17(h); (ii) Three (3) sets of color drawings; (iii) A black and white photocopy that accurately depicts, to the extent possible, the subject matter shown in the color drawing; and (iv) An amendment to the specification to insert (unless the specification contains or has been previously amended to contain) the following language as the first paragraph of the brief description of the drawings: The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee." formal informal B. Other Papers Enclosed Pages of declaration and power of attorney Pages of abstract Other

4. Add	itional	papers enclosed
) Am	nendment to claims
		Cancel in this applications claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
		Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
×) Pre	eliminary Amendment
X] Info	ormation Disclosure Statement (37 C.F.R. § 1.98)
NOTE:		R. § 1.97 (b) An information disclosure statement shall be considered by the Office if filed by policant within any one of the following time periods:
		Vithin three months of the filing date of a national application other than a continued prosecution ication under § 1.53(d);
		Vithin three months of the date of entry of the national stage as set forth in § 1.491 in an national application;
	(3) B	Before the mailing of a first Office action on the merits; or
WARNII	37	order to ensure consideration of information previously submitted but which has not been possidered in the parent application, an applicant must resubmit the information, complying with 7 C.F.R. § 1.97 and 37 C.F.R. § 1.98, in the continuing application filed under 37 C.F.R. § 1.53(b). ee § 609B(3), M.P.E.P., 7th Edition, Rev. 1.
X) For	m PTO-1449 (PTO/SB/08A and 08B)
X] Cita	ations
	Dec	claration of Biological Deposit
	per	omission of "Sequence Listing," computer readable copy and/or amendment taining thereto for biotechnology invention containing nucleotide and/or ino acid sequence.
) Aut tive	thorization of Attorney(s) to Accept and Follow Instructions from Representa-
	Spe	ecial Comments
	Oth	ner
5. Decl	aratio	n or oath (including power of attorney)
NOTE:	the price by all control application the sign by a straight declaration person	ly executed declaration is not required in a continuation or divisional application provided that or nonprovisional application contained a declaration as required, the application being filed is por fewer than all the inventors named in the prior application, there is no new matter in the attention being filed, and a copy of the executed declaration filed in the prior application (showing nature or an indication thereon that it was signed) is submitted. The copy must be accompanied attement requesting deletion of the names of person(s) who are not inventors of the application filed. If the declaration in the prior application was filed under § 1.47, then a copy of that attended the filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently and declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)–(3).
NOTE:	A decla	aration filed to complete an application must be executed, identify the specification to which it ted, identify each inventor by full name including family name and at least one given name, without

NOTE: A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)–(4).

NOTE: "The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).

	Enci	osed
	Exec	cuted by
		(check all applicable boxes)
		inventor(s).
		legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
	-	□ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.
X	Not	Enclosed.
ti m	ne U.S. nay be t	ne filing is a completion in the U.S. of an International Application or where the completion of application contains subject matter in addition to the International Application, the application treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE W APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.
		Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).
(The d	eclara	tion or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
	ļ	☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Invent	orship	Statement
WARNING	own	e named inventors are each not the inventors of all the claims an explanation, including the tership of the various claims at the time the last claimed invention was made, should be mitted.
The inve	entors	hip for all the claims in this application are:
	The	same.
		or
		the same. An explanation, including the ownership of the various claims at ime the last claimed invention was made,
		s submitted.
		will be submitted.
7. Langu	•	·
A. re	n Engli: quired	cation including a signed oath or declaration may be filed in a language other than English. sh translation of the non-English language application and the processing fee of \$130.00 by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may or the Office. 37 C.F.R. § 1.52(d).
\boxtimes	Engli	sh
	Non-	English
		The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).

8. Assig	nment				
Ď	An assignment of the invention to <u>Nokia Corporation</u>				
ě	•	NEW PATENT APPL w application, send two sep May 4, 1990 (1114 O.G. 7 INDER 37 C.F.R. § 3.73(b)"	7-78). must be filed when a continuation-		
	This is a continuation] divisional application	on and the assignment		
	document for the parent app	lication 0 /	was filed		
	on				
			Reel		
			Frame		
9. Certif	ied Copy				
Certifie	d copy(ies) of application(s)				
Count	ry	Appln. No.	Filed		
Count	ry	Appln. No.	Filed		
Count	ry	Appln. No.	Filed		
from which	ch priority is claimed				
	is (are) attached.				
	will follow.				
NOTE: 3	7 C.F.R. § 1.55 Claim for foreign prior	ity.			
	"(a) • • •				
	(1)(i) In an original application filed unduring the pendency of the application of the application or sixteen months applied is not extendable. The claim must as well as any foreign application for of the application for which priority is intellectual property authority), day, mudo not apply in an application under	n, and within the later of four from the filing date of the p ust identify the foreign applie the same subject matter ar is claimed, by specifying the conth, and year of its filing. The	months from the actual filing date prior foreign application. This time cation for which priority is claimed, and having a filing date before that a application number, country (or The time periods in this paragraph		
	(A) A design application; or				
	(B) An application filed before Novem	ber 29, 2000.			
	(c) Unless such claim is accepted in accepted in accepted in accepted in accepted in accepted under 35 U.S.C. 119(a)-(d) or paragraph (a) of this section is consider 119(a)-(d) or 365(a) is presented after claim may be accepted if the claim iden number, country (or intellectual proper unintentionally delayed. A petition to a or 365(a) must be accompanied by:	r 365(a) not presented wit red to have been waived. If a the time period provided by tifying the prior foreign appli arty authority), and the day,	thin the time period provided by a claim for priority under 35 U.S.C. paragraph (a) of this section, the cation by specifying its application month, and year of its filing was		

- (1) The claim under 35 U.S.C. 119(a)-(d) or 365(a) and this section to the prior foreign application, unless previously submitted;
 - (2) The surcharge set forth in § 1.17(t); and
- (3) A statement that the entire delay between the date the claim was due under paragraph (a)(1) of this section and the date the claim was filed was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional."

NOTE: 37 C.F.R. § 1.63 Oath or declaration.

- "(a) An oath or declaration filed under § 1.51(b)(2) as a part of a nonprovisional application must:
- (c) Unless such information is supplied on an application data sheet in accordance with § 1.76, the oath or declaration must also identify:
 - (2) Any foreign application for patent (or inventor's certificate) for which a claim for priority is made pursuant to § 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month, and year of its filing."

The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 C.F.R. § 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. \$ 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT CF PRIOR U.S. APPLICATION(S) CLAIMED.

10. Fee Calculation (37 C.F.R. § 1.16)

A. X Regular application

	CLAIMS AS	FILED		
Number filed	Number Ex	ktra .	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$770.00
Total Claims (37 C.F.R. § 1.16(c))	14 - 20 = 0	×	\$ 18.00	
Independent Claims (37 C.F.R. § 1.16(b))	2 - 3 = 0	×	\$ 86.00	
Multiple dependent cl if any (37 C.F.R. § 1	• • •	+	\$290.00	
☐ Amendmer☐ Fee for ext	at cancelling extra claims at deleting multiple-depen a claims is not being pa	dencies aid at this ay must be	is enclosed s time. paid or the clair	ms cancelled by amendmen
notice of fee def	ation of the time period set for iciency. 37 C.F.R. § 1.16(d).	response	by the Patent a	and Trademark Office in an
	Filing Fee Calcula	ation		\$ 770.00

В.		3 1	
		(\$340.00—37 C.F.R. § 1.16(f))	
		Filing Fee Calculation	\$
C.		Plant application	
		(\$530.00—37 C.F.R. § 1.16(g))	
		Filing fee calculation	\$
11.	Ass	sertion of Small Entity Status	
		Applicant hereby asserts status as a small en	tity under 37 C.F.R. § 1.27
NO		37 C.F.R. § 1.27(c) deals with the assertion of small entity declaration thereof or by payment as a small entity of the bathe national phase and states:	status, whether by a written specific sic filing fee or the fee for the entry into
		"(c) Assertion of small entity status. Any party (person, organization) should make a determination, pursuant to part to be accorded small entity status based on the definitions and must, in order to establish small entity status for the pur make an assertion of entitlement to small entity status, in tor (c)(3) of this section, in the application or patent in which	agraph (f) of this section, of entitlement set forth in paragraph (a) of this section, pose of paying small entity fees, actually he manner set forth in paragraphs (c)(1)
		(1) Assertion by writing. Small entity status may be establis to small entity status. A written assertion must:	hed by a written assertion of entitlement
		(i) Be clearly identifiable;	
		(ii) Be signed (see paragraph (c)(2) of this section); and	•
		(iii) Convey the concept of entitlement to small entity s is a small entity, or that small entity status is entitled to the While no specific words or wording are required to asse small entity status must be clearly indicated in order to	be asserted for the application or patent. It small entity status, the intent to assert
		(2) Parties who can sign and file the written assertion. The	e written assertion can be signed by:
		(i) One of the parties identified in § 1.33(b) (e.g., an attor § 3.73(b) of this chapter notwithstanding, who can also	mey or agent registered with the Office), of file the written assertion;
		(ii) At least one of the individuals identified as an inventor or declaration has not been submitted), notwithstanding (assertion pursuant to the exception under § 1.33(b) of	1.33(b)(4), who can also file the written
		(iii) An assignee of an undivided part interest, notwithst chapter, but the partial assignee cannot file the assertion § 1.33(b) of this part.	anding §§ 1.33(b)(3) and 3.73(b) of this without resort to a party identified under
		(3) Assertion by payment of the small entity basic filing or I party, of the exact amount of one of the small entity basic (g), (h), or (k), or one of the small entity basic national fees (a)(4), or (a)(5), will be treated as a written assertion of entit type of basic filing or basic national fee is inadvertently so	ic filing fees set forth in §§ 1.16(a), (f), set forth in §§ 1.492(a)(1), (a)(2), (a)(3), lement to small entity status even if the
		(i) If the Office accords small entity status based on paym national fee under paragraph (c)(3) of this section that is balance of the small entity fee that is applicable to that appropriate surcharge set forth in § 1.16(e), or § 1.16(l)	not applicable to that application, any application will be due along with the
		(ii) The payment of any small entity fee other than those se (whether in the exact fee amount or not) will not be treat to small entity status and will not be sufficient to establi	ed as a written assertion of entitlement

or a patent."

a n a ti c a	7 C.F.R. § 1.27(c)(4): "Assertion required in related, continuing, and reissue applications. Status is a small entity must be specifically established by an assertion in each related, continuing and eissue application in which status is appropriate and desired. Status as a small entity in one pplication or patent does not affect the status of any other application or patent, regardless of the relationship of the applications or patents. The refiling of an application under § 1.53 as a ontinuation, divisional, or continuation-in-part application (including a continued prosecution pplication under § 1.53(d)), or the filing of a reissue application, requires a new assertion as to ontinued entitlement to small entity status for the continuing or reissue application."
WARNING: ".	Small entity status must not be established when the person or persons signing the statement an unequivocally make the required self-certification." M.P.E.P., § 509.03 (emphasis added).
	(complete the following, if applicable)
☐ Sta	atus as a small entity was asserted in the prior application
	/, filed on, from which benefit
is	being claimed for this application under:
3	5 U.S.C. § 119(e) 120 121 365(c)
	nd which status as a small entity is still proper and asserted for this pplication.
	A copy of the written assertion of small entity filed in the prior application is included.
establi for a re	nd based on establishment of small entity status, of a portion of fees timely paid in full prior to shing status as a small entity may only be obtained if an assertion under § 1.27(c) and a request efund of the excess amount are filed within three months of the date of the timely payment of I fee. The three-month time period is not extendable under § 1.136. 37 C.F.R. § 1.28(a).
Fili	ng Fee Calculation (50% of A, B or C above)
	\$
12. Request	for International-Type Search (37 C.F.R. § 1.104(d))
	(complete, if applicable)
	ase prepare an international-type search report for this application at the time

13.	r	Payme	nt Being Made at This Tim			
	∇	Not E	nclosed			
		(T	o filing fee is to be paid at this time. This and the surcharge required by 37 C.F.R. § 1.10 Ubsequently.)	6(e) ca	n be	paid
		Enclos	sed .			
		□F	iling fee	\$		
		(9 (5 A	Recording assignment 640.00; 37 C.F.R. § 1.21(h)) See attached "COVER SHEET FOR SSIGNMENT ACCOMPANYING NEW PPLICATION".)	\$		····
		ir W re	retition fee for filing by other than all the exertion on behalf of the inventor where inventor refused to sign or cannot be eached \$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$		
		□ F	or processing an application with a pecification in non-English language \$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(i))	\$		
			rocessing and retention fee 3130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$		
			ee for international-type search report 340.00; 37 C.F.R. § 1.21(e))	\$		
NOTE	fa 37 ei	iling to co 7 C.F.R. § ther the b	\$ 1.21(f) establishes a fee for processing and retaining any application omplete the application pursuant to 37 C.F.R. § 1.53(f) and this, as we \$\\$ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a passic filing fee must be paid, or the processing and retention fee of \$ are from notification under \$ 53(f).	ell as the orior U.S	chang applic	ges to ation,
			Total fees enclosed \$_			
14.	Meth	od of	Payment of Fees			
		Attach	ed is a		·-··	
		Author	ization is hereby made to charge the amount of \$			
		☐ to	Deposit Account No			
			Credit card as shown on the attached credit card inform pro-2038.	mation	autho	riza-
WAR	NING	: Credit	card information should not be included on this form as it may become	ome pub	lic.	
		_	e any additional fees required by this paper or credit a manner authorized above.	any ove	rpayr	nent
		Α	duplicate of this paper is attached.			

15. Authorization to Charge Additional Fees

		If no fees are to be paid on filing, the following items should not be completed.
WARNING:		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.
WARN		Even though small entity status is accorded where the wrong type of small entity basic filing fee or basic national fee is selected but the exact amount of the fee is paid, applicant still needs to pay the correct small entity amount for the basic filing or basic national fee where selection of the wrong type of fee results in a deficiency. While an accompanying general authorization to charge any additional fees suffices to pay the balance due of the proper small entity basic filing or basic national fee, specific authorizations to charge fees under § 1.17 or extension of time fees do not suffice to pay any balance due of the proper small entity basic filing or basic national fee because they do not actually authorize payment of small entity amounts. Changes To Implement the Patent Business Goals; Final Rule [Fed. Reg.: September 8, 2000, pages 54603-54683, at 54611; OG: October 3, 2000, pages 14-39].
	fc	he Office is hereby authorized to charge, in the manner shown above, the ollowing additional fees that may be required by this paper and during the entire endency of this application.
		37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
		37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
NOTE:	must set fo to au	suse additional fees for excess or multiple dependent claims not paid on filing or on later presentation only be paid or these claims cancelled by amendment prior to the expiration of the time period or response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not atthorize the PTO to charge additional claim fees, except possibly when dealing with amendments final action.
		37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
		37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a)).
		37 C.F.R. § 1.17 (application processing fees)
NOTE:	or fut as ind charg const an ex \$ 1.1 requii	A written request may be submitted in an application that is an authorization to treat any concurrent ure reply, requiring a petition for an extension of time under this paragraph for its timely submission, corporating a petition for extension of time for the appropriate length of time. An authorization to be all required fees, fees under § 1.17, or all required extension of time fees will be treated as a directive petition for an extension of time in any concurrent or future reply requiring a petition for tension of time under this paragraph for its timely submission. Submission of the fee set forth in 7(a) will also be treated as a constructive petition for an extension of time in any concurrent replying a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. 36(a)(3).
		37 C.F.R. § 1.18 (Issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
	may be generated the iscurred abance to pay is made in repair to pay in re	on 1.311(b) provides that an authorization to charge the issue fee (§ 1.18) to a deposit account the filed in an individual application only after the mailing of the notice of allowance. Accordingly, all authorizations to pay fees and specific authorizations to pay the issue fee that are filed prior amailing of a notice of allowance will generally not be treated as requesting payment of the issue and will not be given effect to act as a reply to the notice of allowance. Applicant, when paying use fee, should submit a new authorization to charge fees, such as by completing box 6b on the not PTOL-85B form. Where no reply to the notice of allowance is received, the application will stand doned notwithstanding the presence of general authorizations to pay fees or a specific authorization of the issue fee that were submitted prior to mailing of the notice of allowance. Where an attempt due to pay the issue fee but an incorrect amount is submitted, § 1.311(b)(1), or where the Office's fee transmittal form (currently PTOL-85(B)) is completed by applicant and submitted, § 1.311(b)(2), by to a notice of allowance, an exception will be made. Such submissions will operate as a request arge the issue fee to any deposit account identified in a previously filed (i.e., submitted prior to

the mailing of the notice of allowance) authorization to charge fees, and will be allowed to act as payment of the correct issu fee. § 1.311(b). See also th change to § 1.26(b). Notic of September 8, 2000,

Fed. Reg. 54603-54683, at 54646 and 54647.

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

16. Instructions as to Ov rpaym nt

NOTE:	а	Amounts of twenty-five dollars or less will not be returned unless specifically requested within reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may a returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).
	3	Credit Account No.
Ę	כ	Refund

Reg. No. 54,106

Tel. No. (203) 261-1234

Customer No. 004955

SIGNATURE OF PRACTITIONER

Anatoly Frenkel

Ware, Fressola, Van Der Sluys & Adolphson LLP

(type or print name of attorney)

755 Main Street, P.O. Box 224

P.O. Address

Monroe, Connecticut 06468

(New Application Transmittal [4-1]—page 13 of 15)

	p st th	theck the following item if the application in this transmittal claims the benefit or frior U.S. application(s) (including an international application entering the U.S. tage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)
	Ž	Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed
		Number of pages added
•		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.
		Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"
		Number of pages added
	State	ment Where No Further Pages Added
	(if thi	no further pages form a part of this Transmittal, then end this Transmittal with is page and check the following item)
		This transmittal ends with this page.

oxtimes Incorporation by reference of added pages

ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED (37 C.F.R. § 1.78)

17. Relate Back

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. § 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. § 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. § 119, 365(a) or 365(b).) For a c-l-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(complete the following, if applicable)

Amend the specification by inserting, before the first line following the title, the following sentence:

A. 35 U.S.C. § 119(e)

NOTE: 37 C.F.R. § 1.78(a)(4) and (5):

"(4) A nonprovisional application, other than for a design patent, or an international application designating the United States of America may claim an invention disclosed in one or more prior-filed provisional applications. In order for an application to claim the benefit of one or more prior-filed provisional applications, each prior-filed provisional application must name as an inventor at least one inventor named in the later-filed application and disclose the named inventor's invention claimed in at least one claim of the later-filed application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior-filed provisional application must be entitled to a filing date as set forth in § 1.53(c), and the basic filing fee set forth in § 1.16(k) must be paid within the time period set forth in § 1.53(g).

"(5)(i) Any nonprovisional application or international application designating the United States of America claiming the benefit of one or more prior-filed provisional applications must contain or be amended to contain a reference to each such prior-filed provisional application, identifying it by the provisional application number (consisting of series code and serial number).

- (ii) This reference must be submitted during the pendency of the later-filed application. If the later-filed application is an application filed under 35 U.S.C. 111(a), this reference must also be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months from the filing date of the prior-filed provisional application. If the later-filed application is a nonprovisional application which entered the national stage from an international application after compliance with 35 U.S.C. 371, this reference must also be submitted within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) in the later-filed international application or sixteen months from the filing date of the prior-filed provisional application. These time periods are not extendable. Except as provided in paragraph (a)(6) of this section, the failure to timely submit the reference is considered a waiver of any benefit under 35 U.S.C. 119(e) to such prior-filed provisional application. The time periods in this paragraph do not apply if the later-filed application is:
 - (A) An application filed under 35 U.S.C. 111(a) before November 29, 2000; or
 - (B) A nonprovisional application which entered the national stage after compliance with 35 U.S.C. 371 from an international application filed under 35 U.S.C. 363 before November 29, 2000.
- (iii) If the later-filed application is a nonprovisional application, the reference required by this paragraph must be included in an application data sheet (§ 1.76), or the specification must contain or be amended to contain such reference in the first sentence following the title."

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4] ---page 1 of 8)

	"This application claims the benefit of U.S. Provisional Application(s) No(s).:
	APPLICATION NO(S).: FILING DATE
WARNING	: 37 C.F.R. § 1.78(5)(iv): "(iv) If the prior-filed provisional application was filed in a language other than English and an English-language translation of the prior-filed provisional application and a statement that the translation is accurate were not previously filed in the prior-filed provisional application or the later-filed nonprovisional application, applicant will be notified and given a period of time within which to file an English-language translation of the non-English-language prior-filed provisional application and a statement that the translation is accurate. In a pending nonprovisional application, failure to timely reply to such a notice will result in abandonment of the application."
	Language of Prior Filed Provisional Application
(S	upply information for each provisional whose benefit is being claimed)
The above	identified prior filed provisional application whose benefit is being claimed
	was filed in the English language
	was filed in a language other than English and an English translation along with a statement that the translation is accurate was filed in the provisional application
	was filed in a language other than English and an English translation along with a statement that the translation is accurate is filed herewith
	J.S.C. Sections 120, 121 and 365(c)
WARNING:	The applicable provisions for the time and manner of claiming the benefit of a prior U.S. application filing date are set forth in 37 C.F.R. § 1.78(a)(1) and (2) as follows:
	"(a)(1) A nonprovisional application or international application designating the United States of America may claim an invention disclosed in one or more prior-filed copending nonprovisional applications or international applications designating the United States of America. In order for an application to claim the benefit of a prior-filed copending nonprovisional application or international application designating the United States of America, each prior-filed application must name as an inventor at least one inventor named in the later-filed application and disclose the named inventor's invention claimed in at least one claim of the later-filed application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior-filed application must be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
 - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4]
—page 2 of 8)

- (2)(i) Except for a continued prosecution application filed under § 1.53(d), any nonprovisional application or international application designating the United States of America claiming the benefit of one or more prior-filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain a reference to each such prior-filed application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross references to other related applications may be made when appropriate (see § 1.14).
 - (ii) This reference must be submitted during the pendency of the later-filed application. If the later-filed application is an application filed under 35 U.S.C. 111(a), this reference must also be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months from the filing date of the prior-filed application. If the later-filed application is a nonprovisional application which entered the national stage from an international application after compliance with 35 U.S.C. 371, this reference must also be submitted within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) in the later-filed international application or sixteen months from the filing date of the prior-filed application. These time periods are not extendable. Except as provided in paragraph (a)(3) of this section, the failure to timely submit the reference required by 35 U.S.C. 120 and paragraph (a)(2)(i) of this section is considered a waiver of any benefit under 35 U.S.C. 120, 121, or 365(c) to such prior-filed application. The time periods in this paragraph do not apply if the later-filed application is:
 - (A) An application for a design patent;
 - (B) An application filed under 35 U.S.C. 111(a) before November 29, 2000; or
 - (C) A nonprovisional application which entered the national stage after compliance with 35 U.S.C. 371 from an international application filed under 35 U.S.C. 363 before November 29, 2000.
 - (iii) If the later-filed application is a nonprovisional application, the reference required by this paragraph must be included in an application data sheet (§ 1.76), or the specification must contain or be amended to contain such reference in the first sentence following the title.
 - (iv) The request for a continued prosecution application under § 1.53(d) is the specific reference required by 35 U.S.C. 120 to the prior-filed application. The identification of an application by application number under this section is the identification of every application assigned that application number necessary for a specific reference required by 35 U.S.C. 120 to every such application assigned that application number."

图 "	'Th	is application is a	
ē	X	continuation	
		continuation-in-part	
		divisional	
of cope	end	ling application(s)	
2	X	application number 0 / 10/040,891	filed on January 2, 2002"
		International Applicationwhich designated the U.S."	filed on and
NOTE:	Th se	ne proper reference to a prior filed PCT application that crial number and the filing date of the PCT application	t entered the U.S. national phase is the U.S that designated the U.S.
NOTE:	th) Where the application being transmitted adds subject e filing can be as a continuation-in-part or (2) if it is desi an be as a continuation.	matter to the International Application, ther ired to do so for other reasons then the filing
	A)	Added Pages for Application Transmittal Where Benefit	of Prior U.S. Application(s) Claimed [4-1.4] —page 3 of 8

		designated above, namely application, claims the benefit of U.S.
	Provisional Application(s) No(s).:	, dains the belieff of 0.5.
	APPLICATION NO	S).: FILING DATE
C. Publ	lication of International Application	n—Provisional Application
NOTE: 35	U.S.C. 154 Contents and term of patent; pr	ovisional rights.
	(d)(4) REQUIREMENTS FOR INTERNATION	IAL APPLICATIONS—
	the publication under the treaty defined in si the United States shall commence on the di a copy of the publication under the treaty of the treaty of the international application is	aragraph (1) to obtain a reasonable royalty based upon ection 351(a) of an international application designating attemption on which the Patent and Trademark Office receives the international application, or, if the publication under a language other than English, on the date on which ranslation of the international application in the English
The inter	national application corresponding	o the instant application
	was	
	was not	
published u	under PCT Article 21(2) in the Englis	sh language.
	An English translation of the interna	tional application is attached.
18. Relate	e Back35 U.S.C. § 119 Priority	Claim for Prior Application
	C.F.R. § 1.55 Claim for foreign priority.	
n	(a) An applicant in a nonprovisional applicat nore prior foreign applications under the cor f), 172, and 365(a) and (b).	ion may claim the benefit of the filing date of one or ditions specified in 35 U.S.C. 119(a) through (d) and
	during the pendency of the application, and date of the application or sixteen months fr time period is not extendable. The claim me	U.S.C. 111(a), the claim for priority must be presented within the later of four months from the actual filing om the filing date of the prior foreign application This ist identify the foreign application for which priority is for the same subject matter and having a filing date

(ii) In an application that entered the national stage from an international application after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and the Regulations under the PCT."

before that of the application for which priority is claimed, by specifying the application number, country (or intellectual property authority), day, month, and year of its filing. The time period in this

paragraph does not apply to an application for a design patent.

(2) The claim for priority and the certified copy of the foreign application specified in 35 U.S.C. 119(b) or PCT Rule 17 must, in any event, be filed before the patent is granted. If the claim for priority or the certified copy of the foreign application is filed after the date the issue fee is paid, it must be accompanied by the processing fee set forth in § 1.17(i), but the patent will not include the priority claim unless corrected by a certificate of correction under 35 U.S.C. 255 and § 1.323.

The prior U.S. application(s), including any prior International Application designating the U.S., identified above in item 17B, in turn itself claim(s) foreign priority(ies) as follows:

Country			Appln. No.	Filed
The ce	ertified	copy(i s) has (have)		
	bee whi	n filed on ch was filed on	, in prior applic	cation 0 /,
	is (a	re) attached.		
	ap ap a L sta pro do to ent the	International Bureau may not be rollication in the continuing applicolication communicated by the Ind.S. serial number unless the nationage is not entered. Therefore, such secution of a continuing application cuments from the folders and transpequest transfer, retrieve the folders and make a record of such coppriority documents in folders of the german of the relied on. Notice of	elied on without any need ation. This is so because temational Bureau is play all stage is entered. Such a certified copies may roon. An alternative would fer them to the continuing, make suitable record ries in the Continuing Apintemational application of April 28, 1987 (1079).	the been communicated to the PTO by the deal to file a certified copy of the priority use the certified copy of the priority laced in a folder and is not assigned in folders are disposed of if the national not be available if needed later in the dibe to physically remove the priority of application. The resources required notations, transfer the certified copies, plication are substantial. Accordingly, as that have not entered the national O.G. 32 to 46).
		nce of Copendency of Pr		
r	espons	O finds it useful if a copy of the perion is filed with the papers consti or 5, 1985 (1060 O.G. 27).	petition filed in the prio tuting the filing of the	or application extending the term for continuation application. Notice of
A. 🗆	Exte	nsion of time in prior appl	cation	
(This it	tem m	ust be completed and the period set in the p	papers filed in th rior application has	e prior application , if the srun.)
	A pe	tition, fee and response ex	tends the term in t	the pending prior application
	A co	py of the petition filed in	orior application is	attached.
B. 🗆		ditional Petition for Extensi		
		(complete this item, if p	previous item not a	pplicable)
		A conditional petition for exapplication.	tension of time is be	eing filed in the pending prior
		A copy of the conditional p	petition filed in the	prior application is attached.

20. Further Inventorship Statement Wh re B nefit of Prior Application(s) Claimed				
		(complete applicable item (a), (b) and/or (c) below)		
(a) <u>(</u> 5	app	s application discloses and claims only subject matter disclosed in the prior plication whose particulars are set out above and the inventor(s) in this plication are the same.		
		less than those named in the prior application. It is requested that the following inventor(s) identified for the prior application be deleted:		
		(type name(s) of inventor(s) to be deleted)		
(b) [a n	s application discloses and claims additional disclosure by amendment and ew declaration or oath is being filed. With respect to the prior application, inventor(s) in this application are		
		the same.		
		the following additional inventor(s) have been added:		
		(type name(s) of inventor(s) to be deleted)		
(c) [] The	inventorship for all the claims in this application are		
		the same.		
		not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made		
		is submitted.		
		will be submitted.		
21. Ab	andon	ment of Prior Application (if applicable)		
	pen is g	ase abandon the prior application at a time while the prior application is iding, or when the petition for extension of time or to revive in that application ranted, and when this application is granted a filing date, so as to make this dication copending with said prior application.		
NOTE:	part ap	ing to the Notice of May 13, 1983 (103, TMOG 6-7), the filing of a continuation or continuation-in- plication is a proper response with respect to a petition for extension of time or a petition to and should include the express abandonment of the prior application conditioned upon the g of the petition and the granting of a filing date to the continuing application.		
	tition nendm	for Suspension of Prosecution for the Time Necessary to File an		
WARNI	NG: "Ti wh an- ea in	the claims of a new application may be finally rejected in the first Office action in those situations here (A) the new application is a continuing application of, or a substitute for, an earlier application, d (B) all the claims of the new application (1) are drawn to the same invention claimed in the rdier application, and (2) would have been properly finally rejected on the grounds of art of record the next Office action if they had been entered in the earlier application." M.P.E.P. § 706.07(b), n ed.		
NOTE:	and for	t is possible that the claims on file will give rise to a first action final for this continuation application some reason an amendment cannot be filed promptly (e.g., experimental data is being gathered) be desirable to file a petition for suspension of prosecution for the time necessary.		
		(check the next item, if applicable)		
		provided herewith a Petition To Suspend Prosecution for the Time Necessary in Amendment (New Application Filed Concurrently)		
	(Added	Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4] —page 6 of 8)		

23. Small	Entity (37 C.F.R. § 1.28(a))			
□ A	Applicant has established small entity status by the filing of a statement in parent application			
	A copy of the statement previously filed is included.			
	See 37 C.F.R. § 1.28(a).			
WARNING:	"Small entity status must not be established when the person or persons signing the statement can unequivocally make the required self-certification." M.P.E.P. § 509.03, 7th ed. (emphasis added).			
24. NOTIFICATION IN PARENT APPLICATION OF THIS FILING				
A K	notification of the filing of this			
	(check one of the following)			
2	S continuation			
	continuation-in-part			
] divisional			
s being filed J.S.C. § 120	in the parent application, from which this application claims priority under 35			